

5.0 ENVIRONMENTAL IMPACTS

The impacts of Alternatives 1, 2 and 3 of the DEIS on the affected environment of the Wood River Valley was described in Chapter 5 Environmental Impacts of the DEIS. Since publication of the DEIS, additional analysis has been conducted for some resources, in response to comments received on the DEIS. There have also been regulatory changes since the DEIS was published. This chapter describes changes and updates to the impacts of Alternative 2, the Preferred Alternative. Appendix D contains the full text of the DEIS.

5.1 Land Use *(page 5-1 of the DEIS)*

The impacts of the Preferred Alternative on land use as described in the DEIS are unchanged; however, Blaine County and the Cities of Bellevue, Hailey, Ketchum, and Sun Valley submitted more detailed written descriptions of the relevant transportation elements of their respective plans. These are presented as supplemental information in Chapter 3 of this FEIS.

5.1.1 Consistency with Plans

The consistency of the Preferred Alternative with the comprehensive plans and transportation plans discussed in Section 3.1.1 of this FEIS was evaluated. These plans include policies and objectives that support the use of transit, carpooling, pedestrians and bicyclists. This section supplements the discussion presented in 5.1 Land Use of the DEIS.

5.1.1.1 Blaine County

The Preferred Alternative, Alternative 2, is consistent with the *Blaine County Comprehensive Plans* Recommendation 24. The County was an active participant in the development of SH-75 alternatives considered in the DEIS. The *Blaine County Public Transit Feasibility Study* transit recommendations were taken into account when developing the transit assumptions included in the travel demand forecasting model for the alternatives evaluated in the DEIS.¹⁹ The conceptual design for Alternative 2 includes provision for bus pullouts at several locations between McKercher Boulevard and Elkhorn Road.

The Transit Feasibility Study calls for HOV queue bypass lanes²⁰ and for HOV lanes on SH-75. As described in Section 2.2 Preferred Alternative of this FEIS, the future conversion of the outside lane of Alternative 2 to HOV operation as considered under Alternative 3 in the DEIS is consistent with the future provision for HOV lanes. HOV queue bypass lanes will be redundant with the HOV operations as described in Section 4.1.2 of this FEIS.

The Study's recommended development of local transit operations and supporting infrastructure is not precluded by Alternative 2 or conversion to HOV operations between McKercher Boulevard and Elkhorn Road. With the implementation of a Blaine County regional transit authority on May 1, 2006, the determination of these transit operations and infrastructure will be determined by this transit authority. The Preferred Alternative does not presuppose the results of this local planning process but provides the highway improvements upon which transit vehicles will operate, and provides bus pullouts between

¹⁹ These are detailed in *Transit Considerations*, Tab 5 of Volume III of the SH-75 DEIS.

²⁰ A queue bypass lane refers to traffic operations at a traffic signal whereby vehicles in the HOV lane are given priority. This may be either through the use of an additional signal phase to allow the HOV lane to proceed before the single occupancy vehicle lane, or through the use of a separately constructed lane that will bypass the main traffic queue. The feasibility study did not specify a specific form for the HOV queue bypass lane.

1 McKercher Boulevard and Elkhorn Road. The Preferred Alternative contributes to the accomplishment of
2 the Study's objective and is therefore generally consistent with the Plan.

3 The Preferred Alternative's consistency with the Blaine County Scenic Overlay District was evaluated,
4 relative to proposed noise barriers. Should the two noise barriers described in Section 5.7.3 of the DEIS,
5 and Section 5.7 of this FEIS be constructed, ITD will need to obtain a site alteration permit, conditional use
6 permit, or variance for these barriers to be consistent with, and comply with, Chapter 21A Scenic Overlay
7 District of the Blaine County Code.

8 **5.1.1.2 City of Bellevue**

9 The *Comprehensive Plan for the City of Bellevue* does not contain policies specific to SH-75. The Preferred
10 Alternative does provide additional sidewalks at the southern end of Bellevue that will contribute to
11 pedestrian mobility and safety. The Preferred Alternative's continuous five-lane SH-75 cross-section
12 throughout the City will contribute to safe traffic movement on SH-75. These infrastructure elements are
13 consistent with the guiding policies described in Section 3.1.1.5.

14 **5.1.1.3 City of Hailey**

15 The City of Hailey's planning and transportation plans focus on goals and policies that relate to traffic
16 circulation within the City and integration of land use and transportation elements city-wide. The
17 preliminary results of their current Transportation Master Plan process confirm the need to maintain 5-lanes
18 on Main Street (SH-75) and for traffic signals at SH-75 intersection to improve access to SH-75. Although
19 this transportation plan has not yet been adopted, the Preferred Alternative 2 is consistent with the draft
20 transportation plan recommendations.

21 **5.1.1.4 City of Ketchum**

22 The 2004 Ketchum Transportation Study includes several policies and goals that focus on increasing the
23 role of transit in addressing both internal circulation needs and travel on the SH-75 corridor. The Preferred
24 Alternative and the ability to implement HOV operations when the conditions outlined in Section 2.3.4
25 "Future Conversion to HOV Operations from McKercher Boulevard to Elkhorn Road" of this FEIS are
26 consistent with these policies and goals. The travel demand forecasting model developed for the DEIS
27 included aggressive transit operations assumptions for the year 2025. Alternative 2 is based upon those
28 assumptions.

29 The formation of Mountain Rides, the regional transit authority, provides the institutional mechanism to help
30 meet the City of Ketchum's goals of valley wide transit. Preferred Alternative 2 provides the infrastructure,
31 including bus pullouts, wide shoulders, and pedestrian underpasses located at likely transit stops between
32 McKercher Boulevard and East Fork Road.

33 The Downtown Ketchum Master Plan does not call for any improvements to SH-75 but does emphasize the
34 importance of transit and pedestrian activity. It also recommends consideration of a 3-lane striping of SH-
35 75, rather than the existing 4-lanes. Within the City of Ketchum, the Preferred Alternative does include
36 improvements between Serenade Lane and River Street that will provide improved pedestrian movements
37 across the reconstructed Trail Creek Bridge as well as for transit vehicles entering the City of Ketchum.

38 **5.1.1.5 City of Sun Valley**

39 The City's comprehensive plan of 2005 does not specifically address SH-75. The highway forms the
40 western boundary of the city such that it provides access to Sun Valley but does not pass through it. The
41 plan does express a desire to improve mass transit. The formation of a regional transit authority in May
42 2006 provides the City of Sun Valley with the institutional mechanism to help meet their goals of valley wide

transit. Preferred Alternative 2 provides the infrastructure, including bus pullouts, wide shoulders, and pedestrian underpasses located at likely transit stops between McKercher Boulevard and East Fork Road.

5.2 Social Impacts *(page 5-3 of the DEIS)*

The impacts of the Preferred Alternative, Alternative 2 (including the changes described in Section 2.3.2.1 of this FEIS) on the population and community resources as described in the DEIS are unchanged.

5.3 Environmental Justice *(page 5-7 of the DEIS)*

The impacts of the Preferred Alternative, Alternative 2 (including the changes described in Section 2.3.2.1 of this FEIS) on environmental justice populations as described in the DEIS are unchanged.

5.4 Relocation *(page 5-10 of the DEIS)*

The addition of the Gannett Road roundabout and the Spruce Way pedestrian underpass, as described in Section 2.3.2.1 of Chapter 2 of this FEIS increase the acreage of right-of-way that will be acquired for Alternative 2. The Gannett Road roundabout will add 0.31 acres; the Spruce Way pedestrian underpass will add 1.08 acres of new right-of-way. This additional right-of-way will not require the displacement of any additional housing units or commercial properties.

Table 5.4-1 Residential and Business and Commercial Relocations on page 5-11 of the DEIS is therefore amended. The change to the table is highlighted in bold below.

Revised Table 5.4-1 Residential and Business Commercial Relocations

| Geographic Segment | Acres of Right-of-Way To Be Acquired | Residential Properties To Be Relocated | Commercial Properties To Be Relocated |
|-------------------------------------|--------------------------------------|--|---------------------------------------|
| US 20 to Gannett Road | 79.21 | 0 | 0 |
| Gannett Road to Fox Acres Road | 3.5 | 0 | 0 |
| Fox Acres to McKercher Boulevard | 0 | 0 | 0 |
| McKercher Boulevard to Elkhorn Road | 51.54 | 8 homes 4 mobile homes | 2 |
| Elkhorn to River Street | 0 | 0 | 0 |
| River Street to Saddle Road | 0 | 0 | 0 |
| TOTAL | 134.25 | 12 | 2 |

The Gannett Road roundabout discussed in Section 2.2.1 adds 0.31 acres of additional ROW. The removal of the Ohio Gulch/Starweather pedestrian underpass reduces the ROW required by 0.44 acres; however, the Spruce Way pedestrian underpass adds 1.80 acres to the needed ROW. The total ROW required is 134.25 acres. Changes to the location of the pedestrian underpass is described in Section 2.2.2 of this FEIS.

1 **5.5 Farmlands, Agriculture, Soils and Geology** *(page 5-13 of the DEIS)*

2 The impacts of the Preferred Alternative on prime farmlands and agricultural operations and the
3 interrelationship with area soils and geohazards as described in the DEIS are unchanged.

4 **5.6 Economic Impacts** *(page 5-15 of the DEIS)*

5 The impacts of the Preferred Alternative, Alternative 2, on the economy of the Wood River Valley as
6 described in the DEIS are unchanged.

7 **5.7 Noise** *(page 5-21 of the DEIS)*

8 During preparation of the DEIS, many Blaine County home owners expressed concern with noise levels in
9 the Wood River Valley and from SH-75 specifically. Section 5.7 of the DEIS described the comprehensive
10 noise analysis that was conducted. A special public open house on noise impacts and mitigation was
11 conducted on August 19, 2003 to share the results of the analysis with the general public and homeowners.

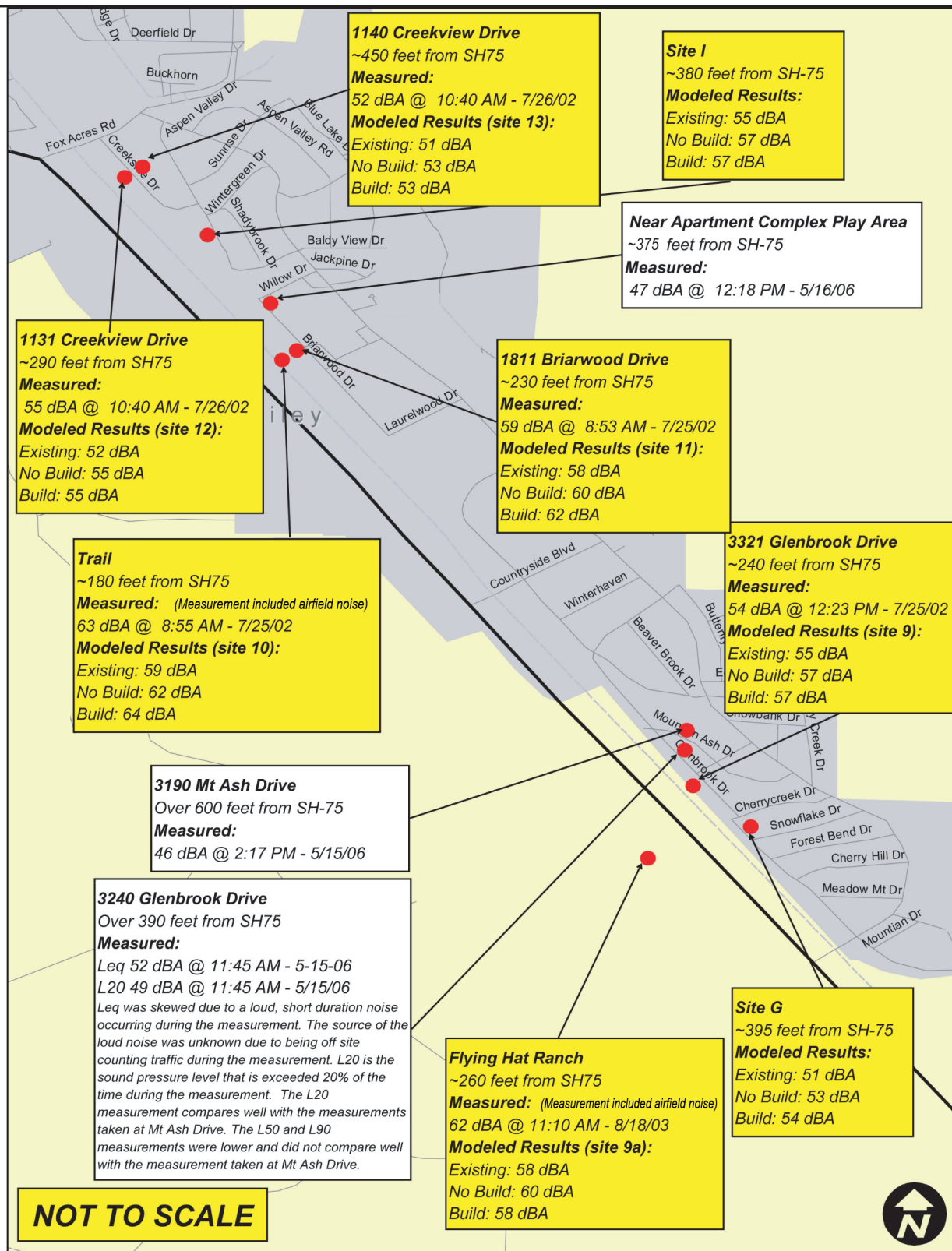
12 Many comments on the DEIS raised concerns with noise impacts. Comments were divided between those
13 who felt that their property should receive noise mitigation from SH-75, while other commenters opposed
14 any form of noise barriers in the valley. To provide additional information to address these comments,
15 additional noise measurements were taken and additional noise barrier analyses conducted. Although the
16 analyses and information contained in the following sections is helpful to address comments on the DEIS,
17 the impacts of the Preferred Alternative on noise sensitive receptors and the required mitigation as
18 described in the DEIS are unchanged.

19 **5.7.1 Additional Noise Measurements and Analysis**

20 Noise measurements were taken at nine additional locations corresponding with the addresses of those who
21 requested noise mitigation in their comments on the DEIS. These additional measurements were taken the
22 week of May 22, 2006. The locations of these measurements, the measured level and distance from SH-
23 75 are shown on Figures 5-1, 5-2, and 5-3. The information presented in yellow boxes on these figures are
24 the receptors that were analyzed as part of the DEIS noise measurement and analysis work (2002 and
25 2003). The information in white boxes presents data for the nine new measured locations.

26 A comparison of the noise levels measured in 2002 and 2003 with those taken in May 2006 shows that the
27 measured noise levels are generally consistent over time for the same general locations and distances of
28 the receptors from SH-75. Table 5-1 Comparison of Noise Levels compares the noise levels measured in
29 May 2006 with those of sites evaluated in the DEIS that have comparable distances from SH-75. A
30 comparison of traffic volumes in 2002 and 2003 with the most recent traffic count data available confirms
31 that traffic levels are comparable between when counts were taken in 2002 and 2003 and when the
32 additional noise measurements were taken in May 2006.

33 As the new measured levels are consistent with the previous analysis and traffic volumes have not changed,
34 the Traffic Noise Model (TNM) predictions for 2025 noise levels for Alternatives 2 and 3 in the DEIS are
35 valid for the additional measurement locations and are applicable to the Preferred Alternative 2 in this FEIS.



SH-75 Timmerman to Ketchum Final EIS



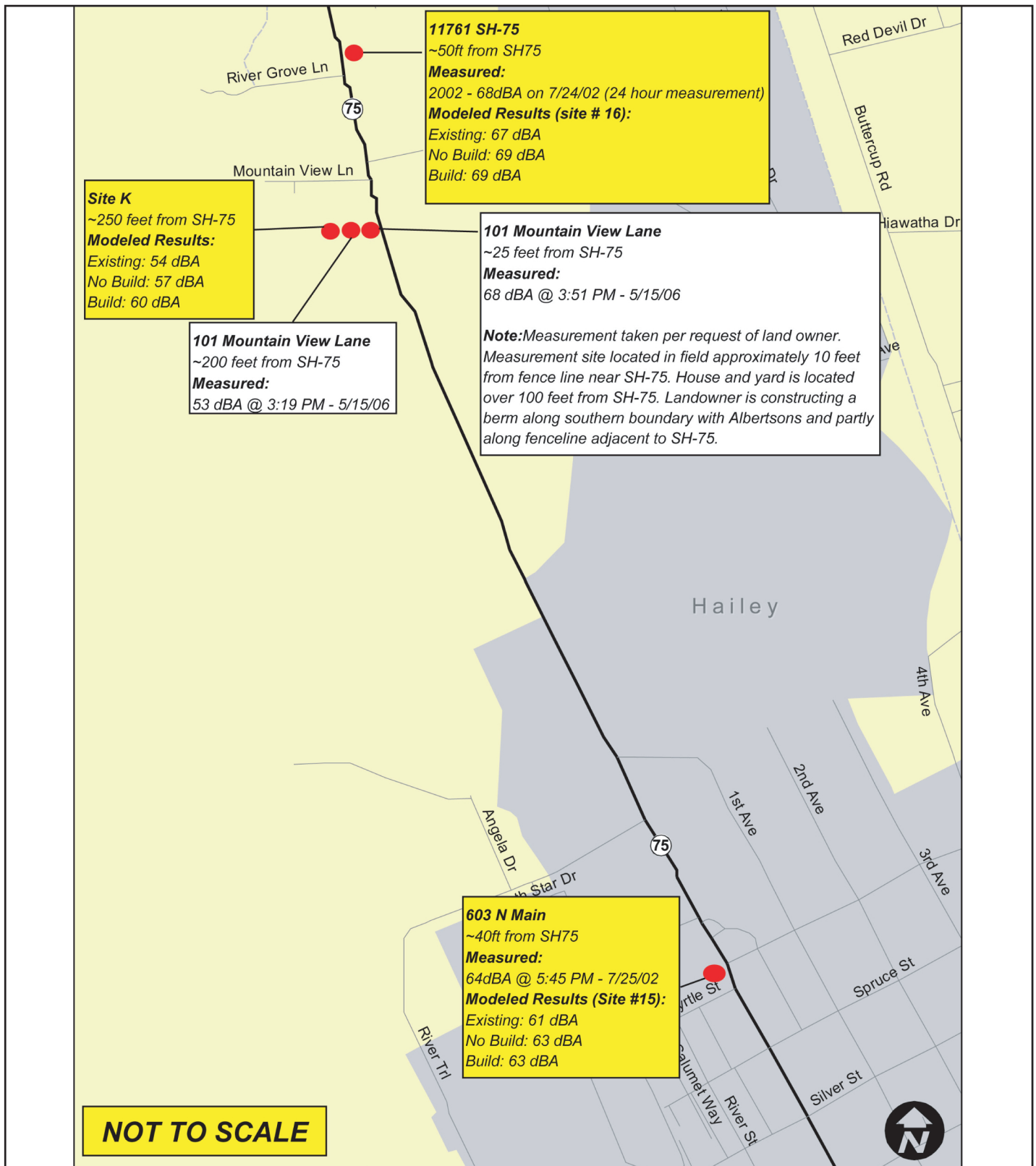
Project No. STP-F-2392(035)
Key No. 3077

Title
Noise Measurements Comparison
South

Figure

5-1

Date: **February 2008**



SH-75 Timmerman to Ketchum Final EIS



Project No. STP-F-2392(035)
Key No. 3077

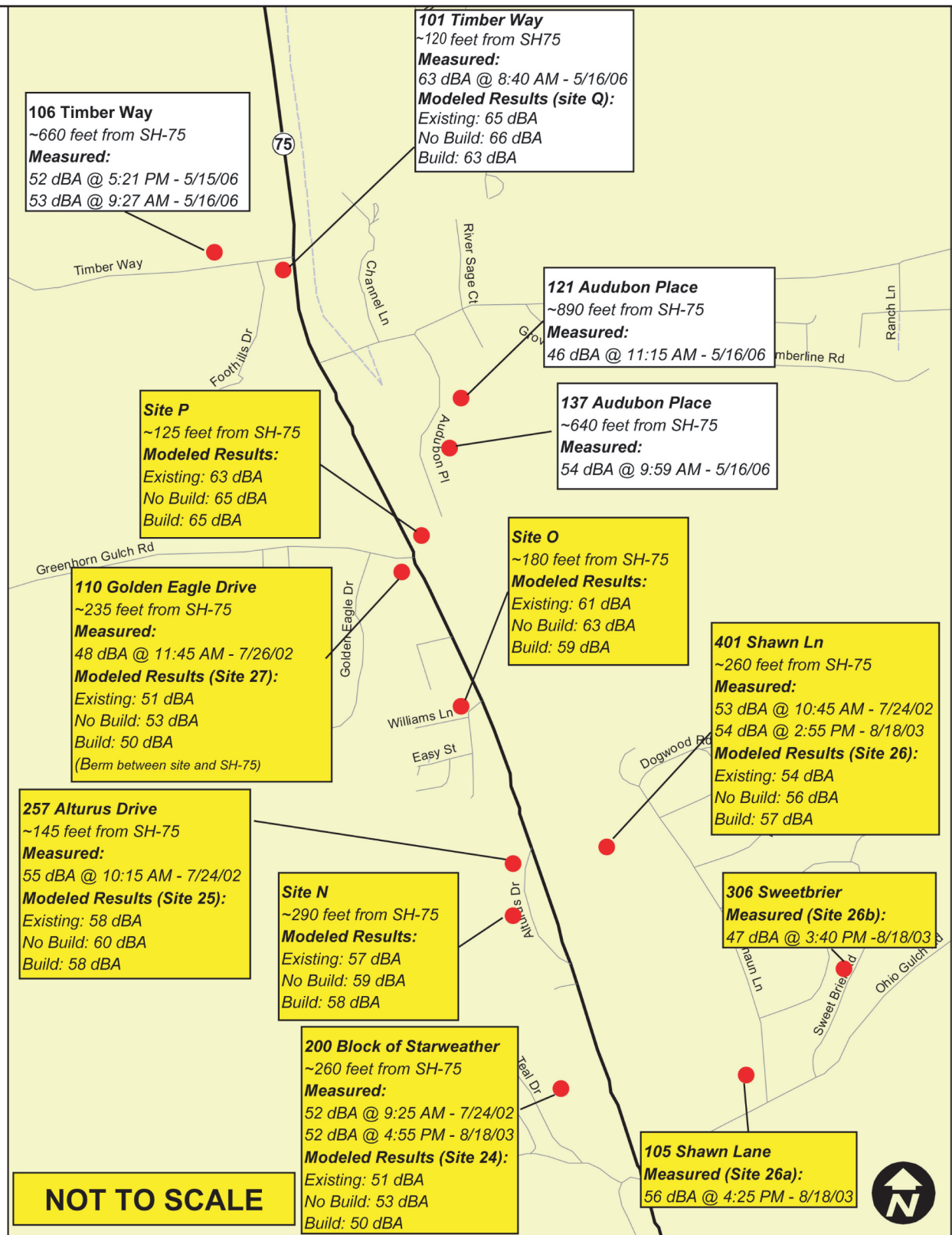
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Noise Measurements Comparison
Central

Figure

5-2

Date: *February 2008*



SH-75 Timmerman to Ketchum Final EIS



Project No. STP-F-2392(035)
Key No. 3077

Title

Noise Measurements Comparison
North

Figure

5-3

Date: February 2008

With two exceptions, the noise levels at the additional measurement locations are well below 60 dBA and well below ITD's Noise Policy that defines a noise impact as at or exceeding 66 dBA (within 1 dBA of the FHWA Noise Abatement Criteria (NAC) of 67 dBA²¹). One measurement taken at 25 feet from the existing SH-75 was 68 dBA; however, the actual receptor (residence at 101 Mountain View Lane) is located almost 200 feet from SH-75 and showed a noise level of 53 dBA. As the measurement taken at 25 feet is not a true receptor, it is not included in Table 5.7-1. The measurement at 101 Timber Way was 63 dBA but below the ITD Noise Policy level.

Based on the TNM analysis for Year 2025 traffic levels done for comparable sites in the DEIS, these locations do not warrant noise mitigation under the ITD Noise Policy and under 23 CFR Part 772.

Table 5.7-1: Comparable DEIS Receptor and Year 2025 Noise Level

| 2006 Location and Measured Noise Level (Distance from SH-75 in feet) | Comparable DEIS Receptor | Year 2025 Noise Level for Preferred Alternative |
|---|---|--|
| 101 Mountain View Lane (200') – 53 dBA | Site K (250' from SH-75) | 60 dBA |
| 106 Timber Way (660') – 53 dBA | Site 27 (235' from SH-75) Site N (290' from SH-75) | 50 dBA 58 dBA |
| 101 Timber Way (120') – 63 dBA | Site Q (140' from SH-75) | 63 dBA |
| 121 Audubon Place (890') – 46 dBA | Site 26 (260' from SH-75) Site 26b (>1000' from SH-75) | 57 dBA 47 dBA (2003 measured level) |
| 137 Audubon Place (640') – 54 dBA | Site 26 (260' from SH-75) Site H (395' from SH-75) | 57 dBA 58 dBA |
| 3240 Glenbrook Drive (390') – 52 dBA | Site I (380' from SH-75) Site G (395' from SH-75) Site H (395' from SH-75) | 57 dBA 54 dBA 58 dBA |
| 3190 Mount Ash Drive (>600') – 46 dBA | Site 13 (450' from SH-75) Site G (395' from SH-75) Site H (395' from SH-75) | 53 dBA 54 dBA 58 dBA |
| Apartment complex in Woodside (375')– 47 dBA | Site I (380' from SH-75) Site G (395' from SH-75) Site H (395' from SH-75) | 57 dBA 54 dBA 58 dBA |

5.7.2 Supplemental Noise Barrier Analysis

Additional noise barrier analysis was conducted to address comments received on the DEIS. Site 17 "Treasure Lane" was examined as the residents of Treasure Lane had repeatedly expressed their desire for a noise barrier at their location. The analysis of this site in the DEIS concluded that a noise barrier was not warranted.

Additional analysis was conducted for Site 29 "12457 SH-75 Country Chalet", and Site 32 "12556 SH-75". The DEIS had found that noise barriers were feasible to mitigate noise at these locations. As described in Section 3.1.1.1 of this FEIS, Chapter 21A Scenic Highway Overlay District of the Blaine County Code limits the height of walls, berms, and fences adjacent to SH-75. This height is variable depending upon the

²¹ 23 CFR Part 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise

distance from the centerline of SH-75. This ordinance is intended to preserve the scenic vistas as viewed from SH-75. As the barriers for Site 29 and Site 32 will not comply with these height restrictions, additional analysis was conducted to determine whether a shorter barrier that could comply with the code would also be effective at mitigating noise

The DEIS and FEIS must evaluate noise impacts of the Preferred Alternative in accordance with 23 CFR 772 procedures and ITD Noise Policy requirements in order to comply with federal regulations.

5.7.2.1 Site 17 “Treasure Lane”

The noise analysis conducted for the DEIS found that this area did not warrant noise mitigation. An analysis of the noise mitigation effectiveness of a 6-foot high barrier was completed in response to numerous comments received from Treasure Lane residents, and in recognition of the Blaine County ordinance limiting wall height. ITD conducted an additional analysis to determine whether a six-foot privacy fence that will comply with the Blaine County berm ordinance and be constructed to noise barrier standards will provide any noise attenuation for Treasure Lane residents.

Three receptors (17, 17a and 18) were used to characterize traffic noise levels in the vicinity of Site 17 to provide additional data resolution for noise barrier analysis. Receptors 17 and 17a are located in the first row of houses next to SH-75 and receptor 18 is in the second row. Noise levels at Site 17 were predicted to be 61 to 62 dBA for first row residences and 57 dBA for second row residences under the Build Alternatives 2 and 3. A noise wall approximately 1,090 feet long and 6 feet high, with an area of 6540 square feet was evaluated at the right of way line between the receptor and the SH-75. The construction planning cost of this wall is estimated to be \$163,500.

The noise wall will not be effective at 6 feet tall because it will not provide a 5 dBA reduction at the receptors of concern in accordance with ITD Noise Policy definition of effectiveness. The barrier will provide the minimum noise reductions required by policy of 10 dBA at 10 feet from the wall and 5 dBA at 100 feet from the wall. However, it will not provide the required 5 dBA reduction at sensitive receptors of concern (receptors 17, 17a, and 18). In addition, this height will not provide protection from L_{max} noise levels associated with truck pass-bys because it will not block the line of sight to truck exhaust stacks. Noise levels will be reduced by 2 to 11 dBA depending on how close to the wall the receiver is located (Table 5.7-2).

Table 5.7-2: Noise Levels and Reductions at Site 17 (dBA)

| Receptor | Existing Year 2000 | No Build Year 2025 | 2025 Build No Wall | 2025 Build With 6ft Wall | Noise Reduction Compared to No Wall |
|-----------|-----------------------|-----------------------|-----------------------|-----------------------------|--|
| 10 feet* | N/A | N/A | 70 | 59 | -11 |
| 100 feet* | N/A | N/A | 62 | 57 | -5 |
| 17 | 64 | 65 | 62 | 59 | -3 |
| 17a | 63 | 65 | 61 | 59 | -2 |
| 18 | 56 | 58 | 57 | 53 | -4 |

* Barrier insertion was modeled 10 feet and 100 feet behind the barrier in accordance with ITD policy. These locations do not represent sensitive receptors; therefore they were not modeled for existing or future No Build conditions.

The noise levels in this area will not approach or exceed the NAC (67 dBA) and therefore a substantial noise impact will not occur under the ITD Noise Policy.

Although a solid six foot fence will provide some attenuation and comply with the Blaine County ordinance, it will not be eligible for funding by FHWA as a noise barrier.

5.7.2.2 Site 29 “12457 SH-75 Country Chalet”

Receptor 29, representing 16 housing units in the mobile home park north of Gimlet Road, will experience an impact of 66 dBA from the increased traffic on SH-75 in Year 2025 under Preferred Alternative. A 10 to 12-foot high noise wall was previously analyzed at this site, documented in the DEIS, and was found to be feasible and eligible for federal funding. The reasonableness of the barrier needed to be evaluated further regarding consistency with Blaine County wall and berm height restrictions and acceptance by affected land owners and residents.

A six-foot high noise wall approximately 650 feet long, with an area of approximately 3,900 square feet was evaluated at the right of way line between the receptor and the SH 75. The walls estimated construction planning cost is \$97,500.

A six-foot noise wall does not meet the minimum noise reduction requirements of 10 dBA at 10 feet from the wall and 5 dBA at 100 feet from the wall, required by the ITD Noise Policy. In addition the wall will not provide a reduction of 5 dBA at receptors 29, S, and T (Table 5.7-3). Receptors S and T are located immediately south of, and immediately north of Receptor 29, respectively. A six foot wall may not provide protection from L_{max} noise levels because it will not block the line of sight to truck exhaust stacks. As a 6-foot wall will not provide the level of attenuation required by ITD’s Noise Policy, the 6 foot wall will not be eligible for funding by FHWA.

Table 5.7-3: Noise Levels and Reductions at Site 29 (dBA)

| Receptor | Existing Year 2000 | No Build Year 2025 | 2025 Build No Wall | 2025 Build With 6ft Wall | 2025 Build Noise Reduction from 6' Wall Compared to No Wall | 2025 Build Noise Reduction from 10-12' Wall Compared to No Wall |
|----------|-----------------------|-----------------------|-----------------------|-----------------------------|--|--|
| 10 feet | N/A | N/A | N/A | 65 | -9 | -14 |
| 100 feet | N/A | N/A | N/A | 60 | -4 | -6 |
| 29 | 66 | 68 | 66 | 63 | -3 | -3 |
| S | 62 | 64 | 62 ¹ | 59 | -3 | -4 |
| T | 61 | 62 | 60 ¹ | 60 | 0 | -1 |

5.7.2.3 Site 32 “12556 SH-75”

Receptor 32, representing 8 mobile homes west of SH-75 just south of Hospital Drive/Broadway Run North, will experience a noise impact of 67 dBA in Year 2025 from Preferred Alternative. A noise wall was previously analyzed at this site and was found to be feasible. The reasonableness needed to be evaluated further regarding consistency with county ordinances restricting barrier heights to 6 feet and acceptance by affected land owners and residents.

A noise wall approximately 610 feet long and 6 feet high, with an area of approximately 3,660 square feet was evaluated at the right of way line between the receptor and SH-75. The estimated planning level construction cost of the wall is \$91,500.

The noise wall will be effective at 6 feet tall; however, this height may not provide protection from L_{max} noise levels because it will not block the line of sight to truck exhaust stacks. Noise levels will be reduced by 6 to 11 dBA depending on how close to the wall the receiver is located (Table 5.7-4).

Table 5.7-4: Noise Levels and Reductions at Site 32 (dBA)

| Receptor | Existing Year 2000 | No Build Year 2025 | 2025 Build No Wall | 2025 Build With 6ft Wall | 2025 Build Noise Reduction from 6' Wall Compared to No Wall | 2025 Build Noise Reduction from 10-12' Wall Compared to No Wall Design |
|----------|--------------------------|-----------------------|--------------------------|--------------------------------|--|---|
| 10 feet | N/A | N/A | N/A | 60 | -11 | -12 |
| 100 feet | N/A | N/A | N/A | 59 | -6 | -7 |
| 32 | 67 | 68 | 67 | 61 | -6 | -7 |

As a six-foot high barrier at this location does meet the attenuation requirements set forth by the ITD Noise Policy, and will be eligible for federal funding, it should be considered during final design in accordance with the noise barrier implementation procedures described in the following section.

5.7.3 Noise Barrier Implementation

The DEIS documents that under FHWA and ITD regulations and policy, noise mitigation is feasible at two locations, Site 29 (10' to 12' wall would be required for full mitigation) and Site 32 (8' wall required for full mitigation). The height of these noise walls would be inconsistent with the Scenic Highway Overlay District of the Blaine County Code. The relevant portion of the code is described in Section 3.1.1 of this FEIS. This inconsistency is noted in sub-section 5.16.3.4 of Section 5.16 Visual Impacts of the DEIS (page 5-139).

The code also specifies a process for construction of walls, berms, fences and trees that do not qualify as a categorical exclusion under the code:

Unless a categorical exclusion applies, construction of freestanding walls, earthen berms, fences and sight obscuring screens of trees within the Scenic Highway Overlay District require a site alteration permit, which is a type of special use permit authorized by Idaho Code section 67-6512.

In light of this inconsistency with the Code, the FEIS assessed shorter fences (6' height) at sites 29 and 32, as discussed above. The analysis showed that would both attenuate noise, and that the level of attenuation would be sufficient to justify FHWA funding at Site 32 but not at site 29.

Section 1350.06 ITD Traffic Noise Analysis and Abatement Policy and Procedures of ITD's June 2007 Noise Policy states:

Noise abatement will not be implemented if the majority (50% +1) of the impacted people are in opposition or indifferent to noise mitigation. Opposition to barrier construction shall be documented in writing, such as formal surveys or petitions.

Other comments were received during preparation of the DEIS and on the DEIS on the undesirable impacts of noise walls, in addition to potential inconsistency with the Blaine County Code. These include the visual impact of a high barrier along the SH-75 Scenic Highway corridor, blocked views of the valley vistas and mountains, localized decrease in wildlife permeability that may trap animals on the highway, and possible restriction of future additional SH-75 access to properties. Based on these comments, it is recognized that the survey or petition results may not support the implementation of noise barriers at Sites 29 and/or 32.

The owners of record for the properties that will be directly impacted by the two noise barriers have been contacted by ITD as of the time of publication of this FEIS. Should the majority of impacted people (50% + 1) support the full-height noise barriers for Receptors 29 and 32, ITD will apply for a site alteration permit or a conditional use permit or variance under Section 9-21A of the Blaine County Code. If a majority vote for noise-barriers sized to be consistent with the Code, no special permit or variance will be needed, but the barrier for site 29 would not be eligible for federal funding. It is not possible to predict whether a majority will vote for noise barriers, the height of any approved barriers, or whether a special permit or variance would be granted by the County if applied for.

5.8 Air Quality *(page 5-32 of the DEIS)*

5.8.1 Revised Section 600 “Air Quality” of the ITD Environmental Process Manual

Subsection 650.02 “Areas of Concern” of the ITD Environmental Process Manual does not identify Blaine County as a federally-designated air quality non-attainment/maintenance area for carbon monoxide or particulates. In accordance with Subsection 650.03 “Project Screening, Analysis and Documentation for CO, PM or MSAT”, the Preferred Alternative “is not within a Federally designated air quality non-attainment or maintenance area nor is it within an IDEQ air quality area of concern. Therefore, the project has minimal likelihood of exceeding Federal air quality standards.” The air quality analysis conducted in Section 5.8 of the DEIS demonstrates that the Preferred Alternative (Alternative 2 in the DEIS) will not exceed the NAAQS for maximum one-hour average CO concentrations (Table 5.8-1, page 5-35 of the DEIS) nor for maximum eight-hour average CO concentrations (Table 5.8-2, page 5-36 of the DEIS).

5.8.2 Preferred Alternative Air Toxics Analysis

Preferred Alternative is defined as a “minor widening project”. Minor highway widening projects are those efforts for which the ultimate traffic level is predicted to be less than 150,000 AADT. Widening projects that surpass this projection are considered major endeavors.

For the alternatives considered in the DEIS and for Preferred Alternative in this FEIS, the amount of MSATs emitted will be proportional to the vehicle miles traveled, or VMT, assuming that other variables such as fleet mix are the same for each alternative. Based on the Year 2025 travel forecasting model described in Chapter 4 of the DEIS, the total daily traffic and corresponding VMT will increase over time, relative to existing conditions. The emissions increase from this higher VMT is offset somewhat by lower MSAT emission rates due to increased speeds; according to EPA's MOBILE6 emissions model, emissions of all of the priority MSATs except for diesel particulate matter decrease as speed increases. The extent to which these speed-related emissions decreases will offset VMT-related emissions increases cannot be reliably projected due to the inherent deficiencies of technical models.

Because the estimated VMT under each of the Alternatives is the same, it is expected there will be no appreciable difference in overall MSAT emissions among Alternatives 2 and 3 in the DEIS and the Preferred Alternative in this FEIS. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce MSAT emissions by 57 to 87 percent between 2000 and 2020. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The additional travel lanes contemplated as part of the Preferred Alternative will have the effect of moving some traffic closer to nearby homes, schools and businesses; therefore, there may be localized areas where ambient concentrations of MSATs could be higher than with Alternative 1 No Build. The localized increases in MSAT concentrations will likely be most pronounced along the expanded roadway sections that will be built between McKercher Boulevard and Elkhorn. However, as discussed above, the magnitude and the duration of these potential increases compared to the No-build Alternative cannot be accurately quantified due to the inherent deficiencies of current models. In sum, when a highway is widened and, as a result, moves closer to receptors, the localized level of MSAT emissions for the Build Alternative (Preferred Alternative) could be higher relative to the No Build Alternative, but this could be offset due to increases in

1 speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSATs will
2 be lower in other locations when traffic shifts away from them. However, on a regional basis, EPA's vehicle
3 and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost
4 all cases, will cause region-wide MSAT levels to be significantly lower than today.

5 **5.9 Water Resources** *(page 5-37 of the DEIS)*

6 The Environmental Protection Agency submitted comments on the DEIS. A response to their comments is
7 included in Appendix B, pages B-2 of this FEIS. A subsequent meeting with the EPA, the US Army Corps of
8 Engineers, FHWA and ITD was held on April 5, 2006 to discuss these comments. EPA clarified that
9 additional information is needed concerning the specific Big Wood River bridge design to fully understand
10 and evaluate the impacts of the bridge and to ensure that it meets with the Section 404(b)(1) guidelines of the
11 Clean Water Act. EPA therefore requested additional coordination during the final design of this bridge.
12 This commitment is included in Section 7.3 Commitments on page 7-12 of this FEIS.

13 Section 5.9.3 Mitigation of Water Resource Impacts of the DEIS stated that National Pollutant Discharge
14 Elimination System (NPDES) permits are issued by the Idaho Department of Environmental Quality (IDEQ).
15 In Idaho, there has not been full delegation of the Clean Water Act to the State, such that the NPDES permit
16 is issued by the Environmental Protection Agency (EPA), not IDEQ.

17 **5.10 Vegetation** *(page 5-46 of the DEIS)*

18 The impacts of the Preferred Alternative, Alternative 2, on vegetation as described in the DEIS are
19 unchanged.

20 **5.11 Wetlands** *(page 5-51 of the DEIS)*

21 The DEIS described a conceptual wetlands mitigation plan for the Boulder Flats area in Section 5.11.5 that
22 will mitigate for impacts to natural wetlands and irrigation dependent wetlands, in order to comply with
23 Executive Order 11990, 23 CFR Part 777 and Department of Transportation Order 5660.1A. FHWA has a
24 policy of no net loss of wetlands that is not dependent on wetland type or source of hydrology. The
25 following discussion supplements Section 5.11.5 of the DEIS.

26 Since this concept plan was developed, additional technical work has been conducted. A topographic
27 survey of the Boulder Flats area was conducted. Wetlands delineation of the Boulder Flats wetlands was
28 completed and considered by the U.S. Army Corps of Engineers. More detailed conceptual engineering of
29 the wetlands mitigation concept plan was done, using the survey and wetlands delineation information.

30 A revised wetlands mitigation concept plan was developed and is shown in Figure 5-4; it supersedes Figure
31 5.11-2 on page 5-61 of the DEIS. Based on the more detailed engineering using surveyed topographical
32 mapping and delineated wetlands in the Boulder Flats area, it was determined that the relocation of SH-75
33 in the Boulder Flats area will impact 1.07 acres of natural wetlands. This is in addition to the 1.19 acres of
34 natural wetlands in the project area and 1.18 acres of irrigation-dependent wetlands disclosed in the DEIS.
35 The Preferred Alternative, including the realignment of SH-75 in the Boulder Flats area, will therefore impact
36 a total of 3.44 acres of wetlands.

37 In response to the EPA's comments on Section 5.11.5 of the DEIS, additional analysis of the proposed
38 wetlands impacts and mitigation and justification for a conclusion of no net loss of wetlands has been
39 developed and is described below.

40 Natural wetlands, including those impacted in the Boulder Flats area, will be replaced by restoration
41 wetlands at the Boulder Flats site. Details of the restoration are discussed below. Replacement ratios

commonly used to estimate the replacement of wetland areas are 3:1 for natural Palustrine emergent (PEM) and Palustrine scrub-shrub (PSS) wetlands and a 5:1 ratio for natural Palustrine forested (PFO) wetlands. These mitigation ratios generally account for temporal loss of wetland functions while the wetlands are establishing and as a contingency for failure of wetlands to establish (for example, lack of hydrology). Based on these ratios it is estimated that 7.14 acres of constructed wetlands will be needed to offset the impacts of Preferred Alternative to natural wetlands. The mitigation ratios and acreages required to fully replace the natural wetland functions and values affected by these wetland losses are shown in Table 5-1.

Table 5-1: Estimated Wetland Mitigation Area Required for Natural Wetlands (acres)

| Wetland Type | Natural Wetlands | Mitigation Site Wetlands | Mitigation Ratio | Total Area Required |
|------------------------|------------------|--------------------------|------------------|---------------------|
| Palustrine emergent | 0.73 | NA | 3:1 | 2.19 |
| Palustrine scrub-shrub | 0.28 | NA | 3:1 | 0.84 |
| Palustrine forested | 0.18 | NA | 5:1 | 0.90 |
| Palustrine scrub-shrub | NA | 1.07 | 3:1 | 3.21 |
| Totals | 1.19 | 1.07 | NA | 7.14 |

* Mitigation will be accomplished by moving canal/ditch to adjacent property.

The following discussion illustrates how the wetland functions and values from the mitigation site will account for the functions and values lost by construction of Preferred Alternative, including the 1.18 acres of I-D wetlands, 1.19 acres of project impacted natural wetlands, and the Boulder Flats impacted wetlands.

On its current alignment, SH-75 cuts off 19 acres of wetlands from a natural wetland complex in the Boulder Flats area. The location of these 19 acres is shown graphically on Figure 5-4. Removal of the SH-75 roadbed at the Boulder Flats site will create 6.11 acres of wetlands and reconnect these additional 19 acres of wetlands to the Big Wood River floodplain.

The Montana Department of Transportation's Wetlands Assessment Method categorizes wetlands based on their quality. This method was adopted for use on this project.

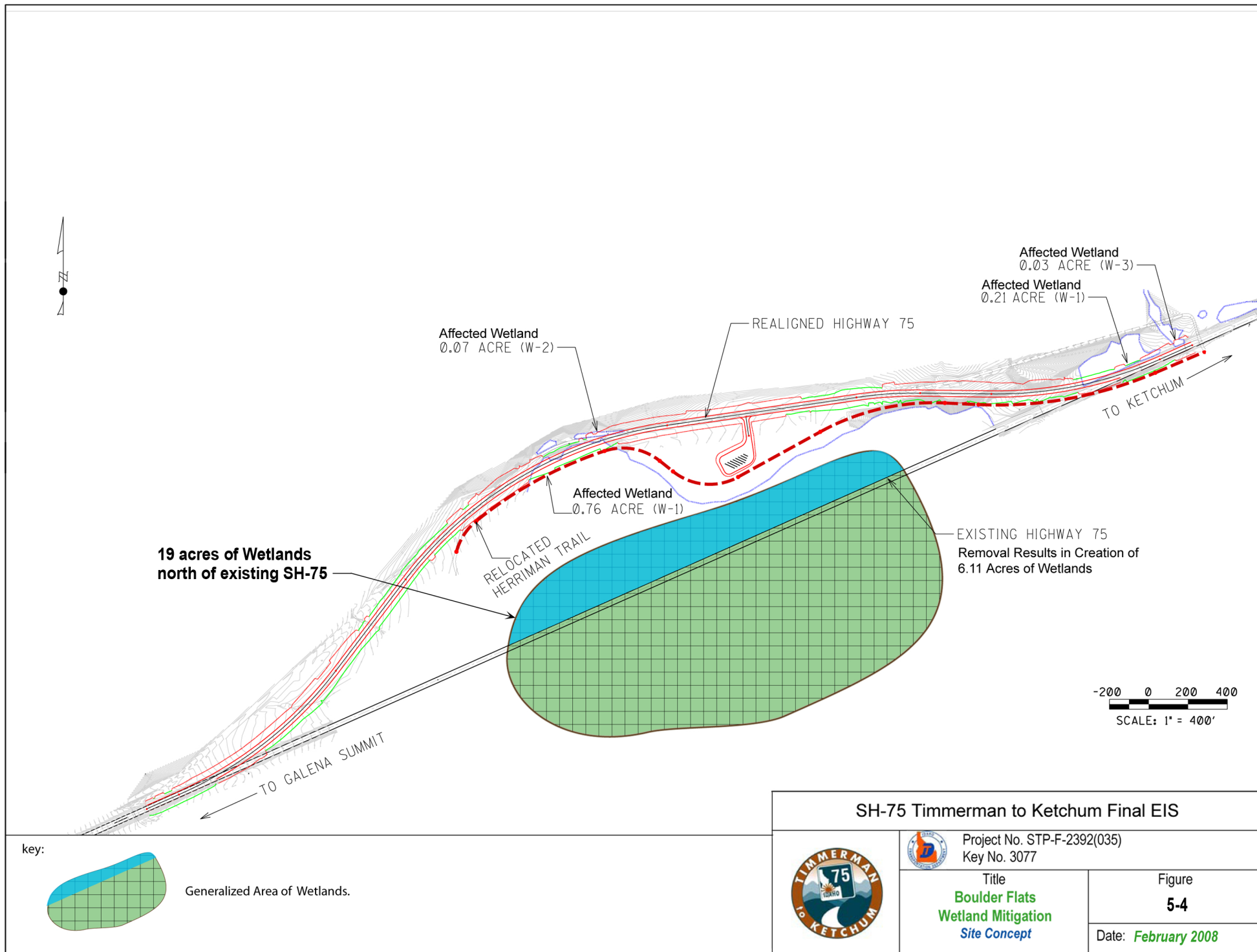
Category I wetlands are of exceptionally high quality, or are important from a regulatory standpoint. They can represent a high quality example of a rare wetland type, provide irreplaceable ecological functions, exhibit exceptionally high flood attenuation capability, be rated exceptionally high for Plant Community Composition, or are assigned high ratings for most of the assessed functions.

Category II wetlands are those that provide habitat for sensitive plants or animals, function at very high levels for wildlife/fish/amphibian habitat, or are assigned high ratings for many of the assessed functions.

Category III wetlands generally have moderate to low Plant Community Composition rating, and have a higher level of disturbance than Category I and II wetlands. They can provide many functions and values, although they may not be assigned high ratings for as many parameters as are Category I and II wetlands.

Category IV wetlands are generally small, isolated, and are typically rated low for Plant Community Composition. These wetlands provide little in the way of wildlife habitat.

Based on the Montana Department of Transportation's Wetlands Assessment Method, it is estimated that the creation or enhancement of the Boulder Flats wetlands will result in Category II wetlands. These created or enhanced wetlands will have sufficient functions and values to replace the Category III and IV wetlands that make up the majority of wetlands that will be impacted by the project. They will also have equivalent functions and values when compared to the 0.18 acres of Category II PFO wetlands that will be impacted at the Big Wood River crossing.



1 The primary reason for the higher functions and values for the created or enhanced wetlands will be the
2 result of removal of the roadside disturbances, reconnection of the floodplain, improvement of safety for
3 those on the Harriman Trail and provision of interpretative signing associated with the pullout and parking
4 area, shown schematically on Figure 5-4. The U.S. Army Corps of Engineers and EPA indicated that the
5 potential educational value of the mitigation plan is a contributor to the no net loss determination for the
6 project, based on an April 5, 2006 coordination meeting to discuss EPA's comments on the DEIS.

7 By moving the existing SH-75 roadway out of the wetland area, the mitigation will not only create a
8 structurally diverse PSS wildlife habitat, but it will also remove roadside impacts out of these wetland
9 areas. Common roadside impacts include disturbances from vehicle traffic, noise, increased human
10 activities, habitat modification (mowing), weed introduction and chemical introductions via salt or herbicide
11 applications. The reconnection of 19 acres to the Big Wood River floodplain will increase short and long
12 term surface water storage to the basin and provide enhanced floodwater storage, groundwater recharge,
13 sediment removal, and production export/food chain support.

14 In connection with the relocation of SH-75 in the Boulder Flats area, a section of the Harriman Trail will also
15 be relocated. The Harriman Trail is located on U.S. Forest Service land and will be relocated onto U.S.
16 Forest Service land; no portion of the trail will be incorporated into highway right-of-way. The relocation of
17 the Harriman Trail will eliminate two locations where the Harriman Trail crosses SH-75 at-grade. This
18 relocation will increase the safety for the hikers, bikers and skiers on the Harriman Trail by eliminating these
19 at-grade crossings. This adjustment of the trail also reduces trail maintenance that requires cutting and
20 mowing of willows in the wetlands. An opportunity for wetland education will also be created at a location
21 overlooking the mitigation area where a vehicle pullout and parking area will be created and interpretive
22 signs installed. This parking area is shown on Figure 5-4.

23 Based on the size of the mitigation area, the improved wetland functions and values provided by the
24 mitigation site, and the future educational opportunity, there will be no net loss of wetlands associated with
25 Preferred Alternative.

26 **5.12 Wildlife** *(page 5-64 of the DEIS)*

27 **5.12.1 Bald Eagle Impacts**

28 Bald Eagles were recently removed from the USFWS list and are no longer listed under the ESA. Bald
29 Eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. At
30 the time they were de-listed, US Fish and Wildlife Service provided National Bald Eagle Management
31 Guidelines. The intent of the guidelines is to provide guidance on permitted activities and recommended
32 timing of activities to ensure the continued viability of habitat for bald eagles and compliance with the two
33 acts. This project will follow the recommendations contained in the National Bald Eagle Management Guidelines.

34 ITD will monitor the Big Wood River and Trail Creek crossings for the presence of bald eagles prior to
35 initiating bridge and road construction in these areas. Should bald eagles or their nests be observed, ITD
36 will follow the timing and proximity recommendations in the National Bald Eagle Management Guidelines.

37 **5.12.2 Trail Creek Bridge and Habitat Permeability**

38 At the time of the publication of the DEIS, several options for the widening of SH-75 into Ketchum were
39 evaluated. Some will require the reconstruction of the Trail Creek Bridge. The City of Ketchum submitted a
40 letter during preparation of this FEIS that stated their preference for the option shown as Cross-Section 2 on
41 Figure 2-9 of this FEIS. This option will require the replacement of the Trail Creek Bridge. This bridge
42 replacement is now a part of the Preferred Alternative. Regarding the habitat permeability impacts, the text

on page 5-71 of the DEIS, fourth paragraph, is amended in the following paragraph. The corrected sentence is shown in italics.

The existing 20-foot long by 48-foot wide concrete box culvert will be replaced with a 58-foot 4-inch long by 66-foot 8-inch wide single-span bridge. Currently, the box culvert provides some crossing opportunity for terrestrial wildlife during low water and none during high water. The new bridge will provide about 154 feet of horizontal space and 5 feet of vertical space on each side of the stream channel during a 50-year high water flood, with more space available at lower, more typical water elevations. This effect on habitat connectivity and permeability will be beneficial because it removes an existing impediment to wildlife movement along a critical riparian corridor in Ketchum, where sheltered, riparian crossing opportunities are increasingly rare.

5.13 Fisheries *(page 5-81 of the DEIS)*

The impacts of the Preferred Alternative, Alternative 2, on fisheries and aquatic habitat, as described in the DEIS, are unchanged, with one exception. As stated above in Section 5.12 of this FEIS, the replacement of the Trail Creek Bridge is now a part of the Preferred Alternative. The assessment of impacts of this replacement on riparian habitat discussed on the last paragraph of page 5-85 of the DEIS is therefore amended with language that includes reconstruction of the Trail Creek Bridge. The corrected sentence is shown in italics in the following paragraph.

The reconstruction of the Trail Creek Bridge will result in an estimated loss of 115 linear feet of riparian habitat. This will result from the replacement of the existing 20-foot by 48-foot box culvert with a 58-foot 4-inch long by 66-foot 8-inch wide single-span bridge. Of this total, 30 linear feet will be affected at this bridge site. The remaining linear feet affected will occur upstream where widening of SH-75 north of the bridge crossing requires fill in the channel's floodplain/riparian zone and the removal of some mature cottonwood trees.

5.14 Cultural Resources *(page 5-90 of the DEIS)*

The impacts of the Preferred Alternative, Alternative 2, on cultural resources, as described in the DEIS, are unchanged.

5.15 Section 4(f) *(page 5-97 of the DEIS)*

The Section 4(f) evaluation summarized in Section 5.15 of the DEIS and fully described in Appendix D of the DEIS is unchanged.

As discussed above in Section 5.11 Wetlands, portions of the Harriman Trail will be relocated as part of the wetlands mitigation plan. The Harriman Trail is located on U.S. Forest Service land and will be relocated onto U.S. Forest Service land. No portion of the trail will be incorporated into SH-75 right-of-way. This relocation will therefore not result in a Section 4(f) use of the Harriman Trail.

5.16 Visual Impacts *(page 5-130 of the DEIS)*

The impacts of the Preferred Alternative, Alternative 2, on the visual resources, as described in the DEIS, are unchanged.

5.17 Parks and Recreation *(page 5-141 of the DEIS)*

Section 5.17 Parks and Recreation of the DEIS evaluated the impacts of alternatives on parks and recreation resources. This section supplements the information contained in that section of the DEIS.

5.17.1 Access to Big Wood River

The DEIS identified a need for better access to the Big Wood River at two locations and suggested mitigation measures. The discussion of mitigation in Section 5.17.3 Mitigation of Parks and Recreation Impacts in the DEIS (page 5-143) is replaced with the following information.

In response to comments received on the DEIS, ITD re-examined the feasibility and safety of providing a pullout south of the Big Wood Bridge in the McCammon area to accommodate parking for angler access. The Preferred Alternative will replace the Big Wood Bridge with a new structure. The parapets associated with the new bridge will reduce sight distance for southbound drivers immediately south of the bridge structure. Placement of a pullout on the west side of SH-75 between the parapets and the north entrance to Hospital Drive will introduce additional turning movements into/out of a parking area that will not be fully visible to southbound drivers. It will also potentially conflict with the right turn movements at the north entrance to Hospital Drive. A pullout in this location will increase the potential for vehicle/vehicle conflicts and vehicle/pedestrian conflicts and so is not being considered.

Through discussions with the Idaho Department of Fish and Game, ITD determined that there is ample public parking on Hospital Drive. Anglers can use the existing public parking along Hospital Drive and walk a short distance to the Wood River.

Improved angler access and parking in the general vicinity of Box Car Bend was incorporated into the SH-75 Alturas to Timber Way construction project at East Fork Road. Access was maintained for vehicular parking on the north-upstream quadrant of this area. Footpath access was constructed below the new bridge along both riverbanks to provide access for people and wildlife.

5.17.2 Harriman Trail Impacts

The wetlands mitigation plan described in Section 5.11 of this FEIS includes the relocation of the Harriman Trail within the Sawtooth National Recreation Area of the U.S. Forest Service. The Harriman Trail is currently located on U.S. Forest Service land and will be reconstructed on U.S. Forest Service land. The continuity of the trail will be maintained. The relocation of the trail will eliminate two locations where the Harriman Trail crosses SH-75 at-grade. Elimination of these two crossings will improve the safety of trail users as well as the safety of vehicles on SH-75.

5.18 Utilities *(page 5-143 of the DEIS)*

The impacts of the Preferred Alternative, Alternative 2, as described in the DEIS, are unchanged.

5.19 Hazardous Materials *(page 5-148 of the DEIS)*

How the Preferred Alternative, Alternative 2, will be impacted by any identified hazardous materials sites and whether the Preferred Alternative will generate any hazardous materials, as described in the DEIS, are unchanged.

5.20 Construction Impacts *(page 5-148 of the DEIS)*

5.20.1 Phasing

The phasing scenario contained in the DEIS has changed since publication of the DEIS, in response to changes in existing and anticipated funding and local preferences. A revised phasing is described in Section 2.4 of this FEIS.

5.20.2 Traffic Impacts of Revised Phasing

The Preferred Alternative will be implemented in phases that include preliminary engineering, preparation of right-of-way plans, right-of-way acquisition, and construction.

For each phase discussed below that involves construction, this construction will inconvenience SH-75 users. During construction, legal access points and side roads will be kept open and traffic maintained. Lane restrictions, temporary pavement and flagging activities to enable movement of construction vehicles will contribute to delay for motorists. Speed limits will be reduced. Construction related congestion will increase travel times for all motorists, transit riders, and truck traffic, and affect emergency response times, particularly during peak travel periods.

5.20.2.1 First Phase

The first phase of the revised phasing plan includes the construction of improvements between Timberway and Hospital Drive. It also includes development of preliminary engineering and right-of-way plans and right-of-way acquisition, activities that will not have traffic impacts.

The traffic impact of the construction between Timberway and Hospital Drive was described in the DEIS as Phase 4 (page 5-160 of the DEIS). These impacts are still valid. In addition to the general impacts described in 5.20.2 above, the following additional impact will occur.

There is no continuous alternative route that could provide a detour through this area. Broadway Run could be used as a temporary detour for a portion of this section of SH-75. Through traffic and emergency response vehicles can be directed to Broadway Run and reconnect with SH-75 at the Hospital Drive/Broadway Run/SH-75 intersection. This detour will temporarily adversely affect local traffic on Broadway Run. These impacts could include increased traffic volumes, increased number of trucks, and associated traffic noise.

5.20.2.2 Subsequent Phases

Two of the later phases described in Section 2.4 of this FEIS are for acquisition of right-of-way only for the portions of SH-75 between McKercher Boulevard and Alturas Way, and between US-20 and Gannett Road. These will not have traffic impacts.

Subsequent phases of construction will also have traffic impacts.

Main Street in the Cities of Bellevue and Hailey

Construction of improvements on Main Street in the Cities of Bellevue and Hailey will be a minor inconvenience to motorists as there are four through lanes of traffic in each direction, and there are parallel streets that can be used to detour traffic. This will allow for continuous traffic flow with a minimum of traffic restrictions. Any detoured traffic will temporarily adversely affect local traffic on these streets.

1 **McKercher Boulevard to Greenhorn Bridge**

2 Construction of improvements between McKercher Boulevard to Greenhorn Bridge is the same geographic
3 area described as Phase 3 in the DEIS. The traffic impacts of this construction are disclosed in the DEIS on
4 page 5-160 and repeated here.

5 Traffic will be maintained at all times but lane restrictions will be needed. Some SH-75 motorists will likely
6 choose to divert to Buttercup Road to bypass construction, re-entering SH-75 at the Buttercup/SH-75
7 intersection. Emergency service providers will have the potential to use Buttercup Road to avoid some of
8 the construction activity and minimize impacts to their response times.

9 This potential additional traffic on Buttercup Road will have short-term adverse impacts on the adjacent
10 residential areas. These impacts could include increased traffic volumes, increased number of trucks, and
11 associated traffic noise.

12 The intersection of Spruce Way and SH-75 and the north entrance to Treasure Lane will be permanently
13 closed as part of the Preferred Alternative and as evaluated in Alternative 2 of the DEIS. Motorists will be
14 diverted to Deer Creek Road and the south Treasure Lane entrance, respectively.

15 Because this section of SH-75 has many private driveway access points, motorists entering SH-75 from
16 these driveways and side roads will experience long delays entering the stream of traffic. Through traffic on
17 SH-75 will be congested, particularly during the peak travel hours.

18 **Bellevue to Hailey**

19 Construction of improvements in this section of SH-75 will have impacts similar to those described for Phase
20 I on page 5-159 of the DEIS. However, the construction of improvements on Main Street in Bellevue will
21 already have been constructed as part of Phase I described in Section 5.20.2.1 above. Traffic impacts will
22 therefore occur between north Bellevue and Fox Acres.

23 Congestion will be expected throughout the day during hours of construction as slower speed limits,
24 temporary pavement sections, and narrow lanes restrict free flow of traffic. A detour is feasible as
25 Woodside Road runs north/south through the adjacent communities east of SH-75. Some motorists will
26 likely choose to exit SH-75 at Woodside Boulevard and Countryside Boulevard and use Woodside Road to
27 bypass construction, re-entering SH-75 at the Fox Acres/SH-75 signalized intersection at the southern end
28 of the City of Hailey. Emergency vehicles will likely choose this route to avoid construction delays and
29 minimize response times. This potential additional traffic through the light industrial and residential areas
30 will have short-term adverse impacts, primarily on adjacent residences. These impacts could include
31 increased traffic volumes, increased number of trucks, and associated traffic noise.

32 **5.20.2.3 Mitigation**

33 Mitigation of traffic and access impacts during construction will be provided by a traffic control plan to be
34 prepared by ITD in accordance with ITD standard traffic control drawings and the Manual of Uniform Traffic
35 Control Devices. The traffic control plan will provide for the maintenance of two-way traffic on SH-75 during
36 construction. The traffic control plan will provide for access to all existing legal access points, including
37 residences, businesses, farming operations, and arterial streets.

38 A public information plan will be developed and implemented to inform Wood River Valley residents,
39 businesses, visitors, and other users of SH-75 corridor of construction phasing, detours, and durations.

40 **5.20.3 Construction Noise**

41 The June 2007 revision to Section 1300.00 Noise of the ITD Environmental Design Manual includes Exhibit
42 1300-7 Construction Noise that describes the mitigation for construction noise:

1 The most prevalent construction noise source is equipment powered by internal combustion
2 engines (usually diesel). Noise from equipment likely to be used on this project (tractors, trucks,
3 graders, pile drivers, etc.) will range to about 95 decibels (dBA) when measured from a distance of
4 50 meters (50'). To reduce the impact of construction noise, most construction activities will be
5 confined to the period least disturbing to adjacent and nearby residents, between 7:00 a.m. and
6 7:00 p.m. on weekdays. Mitigation of potential highway construction noise impacts shall
7 incorporate low-cost, easy-to implement measures into project plans and specifications (e.g.
8 equipment muffler requirements, work-hour limits).

9 Consistent with this section of the ITD Noise Policy, the following mitigation will be followed:

- 10 • Construction activities will be limited to between 7 a.m. and 7 p.m. to reduce construction noise
11 levels during sensitive night-time hours.
- 12 • Construction equipment engines will be required to have adequate mufflers, intake silencers, and
13 engine enclosures to reduce their noise by 5 to 10 dBA (U.S. EPA, 1971).
- 14 • Construction equipment will be turned off during prolonged periods when equipment is not in active
15 use to eliminate noise from construction equipment during those periods.

16 **5.21 Energy Impacts** *(page 5-163 of the DEIS)*

17 The energy impacts of the Preferred Alternative, Alternative 2, as described in the DEIS, are unchanged.

18 **5.22 Secondary and Cumulative Impacts** *(page 5-165 of the DEIS)*

19 The secondary and cumulative impacts of the Preferred Alternative, Alternative 2, as described in the DEIS,
20 are unchanged.

21 **5.23 Irreversible and Irretrievable Commitment of Resources** *(page 5-170 of the DEIS)*

23 The analysis of the how the Preferred Alternative, Alternative 2, commits resources, as described in the
24 DEIS, is unchanged.

25 **5.24 Short-Term Uses Versus Long-Term Productivity** *(page 5-171 of the DEIS)*

27 The analysis of the how the Preferred Alternative, Alternative 2, will have short-term versus long-term
28 impacts on productivity, as described in the DEIS, is unchanged.

